4.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- Detailed billing guidelines received from BellSouth.
- Test execution team identified, trained, and scheduled.
- Test scenarios in BLG-1 and BLG-2 completed.
- Test Plan and evaluation criteria defined and approved.

4.4 Test Scope

The test scope will address the following sub-processes and functions to compare performance results.

~~Invoicing Accuracy~~	~~CRIS and CABS bills.~~
~~Invoice Timeliness~~	~~CRIS and CABS bills.~~
~~Usage Data Delivery Timeliness~~	~~Port Usage.~~
~~Usage Data Delivery Completeness~~	~~Port Usage.~~
~~Usage Data Delivery Accuracy~~	~~Port Usage.~~
Invoice Accuracy	Resale, UNE, and Interconnection
Mean Time to Deliver Invoices	Resale, UNE, and Interconnection
Usage Data Delivery Accuracy	Not Disaggregated.
Usage Data Delivery Completeness	Not Disaggregated.
Usage Data Delivery Timeliness	Not Disaggregated.
Mean Time to Deliver Usage	Not Disaggregated.

Figure VI-VIII: Billing Performance ~~Results Comparison~~Measures Evaluation

4.5 Test Activities

1. Acquire and format BellSouth performance data files.
2. Compare disaggregated BellSouth performance results with actual performance results.
3. Flag any unexplained variance in results comparison and determine next steps in execution and resolution process.
4. Log any unexplained variance in exceptions reporting template.
5. Resume results comparison and validation analysis.
6. Generate comparative analysis results reports.

4.6 Exit Criteria

- Global Exit Criteria satisfied.
- Comparative analysis report completed.
- Results variance findings documented.
- Exceptions report completed.
- Test cycle results summary report created.
- Work papers finalized.
- Exit review completed.

5.0 BLG-5: CRIS/CABS Invoicing Documentation Evaluation

5.1 Description

The CRIS/CABS Invoicing Documentation Evaluation is an analysis of the BellSouth-provided documentation used by CLECs to interact with BellSouth's invoicing systems when conducting billing activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's invoicing systems documentation using a variety of operational analysis techniques. Since there is no direct system interaction with CRIS/CABS, this documentation evaluation will be concerned with analyzing the accuracy of documentation pertaining to connectivity to gather invoices; delivery of invoices; and the overall format and contents of the invoices delivered.

5.2 Objective

The objective of CRIS/CABS Invoicing Documentation Evaluation is to assess whether the documentation provided by BellSouth adequately assists CLECs in understanding how to interact with BellSouth's billing function.

5.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- Detailed billing guidelines documentation obtained.
- Teams staffed, scheduled, and trained.
- Documentation evaluation checklists completed.
- Interview guide/questionnaire(s) completed.
- Interviewees identified and scheduled.
- Process for logging incidents identified and accepted.
- Test Plan and evaluation criteria defined and approved.

5.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate CRIS/CABS documentation along with additional relevant information identified during the test.

Billing Invoicing Documentation	Document structure and format.~~Document change management.~~
	Document content.~~Document content management.~~
	Release management.~~Documentation distribution.~~
	Document accuracy.~~Document content.~~

Figure VI-IX: CRIS/CABS Invoicing Document Review Test Scope

5.5 Test Activities

1. Obtain relevant documentation needed to carry out business processes related to billing/invoicing.
2. Conduct documentation evaluation using documentation evaluation checklist.
3. Conduct interviews with BellSouth documentation specialists.
4. Conduct interviews with CLEC documentation users.
5. Log incidents noted during testing.
6. Compile results.
7. Flag any exceptions or mismatched responses and determine next steps in execution resolution process.

5.6 Exit Criteria

- Global Exit Criteria satisfied.
- Documentation checklists completed.
- Interview summaries completed.
- Exception report(s) completed.
- Summary evaluation report completed.
- Exit review completed.

6.0 BLG-6: ODUF/ADUF Documentation Evaluation

6.1 Description

The ODUF/ADUF Documentation Evaluation is an analysis of the BellSouth documentation used by CLECs to interact with BellSouth's usage reporting systems when conducting billing activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's documentation using a variety of operational analysis techniques. Since there is no direct system interaction with BellSouth's systems in this process, this documentation evaluation will be concerned with analyzing the accuracy of documentation pertaining to connectivity to gather usage records; delivery of usage records; and the overall format and contents of the daily usage files delivered.

6.2 Objective

The objective of ODUF/ADUF Documentation Evaluation is to assess whether the documentation provided by BellSouth adequately assists CLECs in understanding how to implement and use all of the ODUF/ADUF functions available to them.

6.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- Detailed billing guidelines received from BellSouth.
- Teams staffed, scheduled, and trained.
- Documentation evaluation checklists completed.
- Interview guide/questionnaire(s) completed.
- Interviewees identified and scheduled.
- Process for logging incidents identified and accepted.
- Test Plan and evaluation criteria defined and approved.

6.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate ODUF/ADUF documentation along with relevant information identified during the test.

Billing Usage Reporting Documentation	Document Structure and Format. ~~Document change management.~~
	Document Content. ~~Document content management.~~
	Release Management. ~~Documentation distribution.~~
	Document Accuracy. ~~Document content.~~

Figure VI-X: ODUF/ADUF Usage Document Evaluation

6.5 Test Activities

1. Obtain relevant documentation needed to carry out business processes related to Billing/Usage reporting.
2. Conduct documentation evaluation using documentation evaluation checklist.
3. Conduct interviews with BellSouth documentation specialists.
4. Conduct interviews with CLEC documentation users.
5. Log incidents noted during testing.
6. Compile results.
7. Flag any exceptions or mismatched responses and determine next steps in the execution and resolution process.

6.6 Exit Criteria

- Global Exit Criteria satisfied.
- Documentation checklists completed.
- Interview summaries completed.
- Exception report(s) completed.
- Summary evaluation report completed.
- Exit review completed.

Section VII

VII. Maintenance and Repair Test Section

A. Overview

The purpose of this section is to define the specific maintenance and repair tests to be undertaken in evaluating the systems and related operational elements associated with BellSouth's maintenance of business with CLECs.

B. Scope

The maintenance and repair test scope is defined in the following table. The table identifies the test target, the interface under test, the primary test objective(s), the BST product offering, and the test technique(s) to be employed.

M&R-1: TAFI Functional Test	TAFI	Functionality	UNE	Transaction Processing
M&R-2: ECTA Functional Test	ECTA	Functionality	UNE	Transaction Processing
M&R-3: ECTA Normal Volume Performance Test	ECTA	Volume Performance	Resale UNE	Transaction Processing
M&R-4: ECTA Peak Volume Performance Test	ECTA	Volume Performance	Resale UNE	Transaction Processing
M&R-5: TAFI Capacity Management Evaluation	TAFI	Processing Capacity	Resale UNE	Inspection Interview
M&R-6: ECTA Capacity Management Evaluation	ECTA	Processing Capacity	Resale UNE	Inspection Interview
M&R-7: M&R Performance ~~Results Comparison~~ Measures Evaluation	TAFI/ ECTA	Performance Reporting	Resale UNE	Performance Comparison, Inspection Interview
M&R-8: TAFI Documentation	TAFI	Documentation	Resale	Document

Evaluation			UNE	Review Interview
M&R-9: ECTA Documentation Evaluation	ECTA	Documentation	Resale UNE	Document Review Interview
M&R-10: M&R Process Evaluation	TAFI ECTA	Performance	Resale UNE	Document Review Inspection Interview

Note: Since TAFI is in large volume production in BellSouth's retail environment, no volume or peak tests are planned.

Figure VII-I: Maintenance & Repair Test Cycles

C. Test Cycles

1.0 M&R-1: TAFI Functional Test

1.1 Description

The TAFI Functional Test will evaluate the functional elements of the trouble reporting and screening process for telephone number assigned UNEs, as delivered to CLECs via the TAFI interface in BellSouth's production environment. This test cycle will be executed by exercising a defined set of TAFI functions associated with trouble management activities against test bed accounts.

The functional elements of TN-based UNE trouble reporting and screening to be specifically targeted by this test include the entry and resolution of trouble reports, query and receipt of status reports, access to test capabilities, access to trouble history, and error conditions.

TAFI functionality will be reviewed along with the documentation addressing its use. BellSouth will be required to identify or establish a test bed of TN-based UNE customer accounts for the purpose of this test.

The Test Manager will coordinate with BellSouth to ensure that BellSouth's and KPMG's performance measurement systems are prepared to track test transaction performance prior to beginning the test.

1.2 Objective

The objective of the TAFI Functional Test is to validate the existence of TAFI trouble reporting and screening functionality for telephone number-assigned UNE customers in accordance with the CLEC TAFI End User Training and User Guide.

1.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- CLEC TAFI End-User Training and User Guide obtained.
- BellSouth's and KPMG's performance measurement tracking systems prepared to track test transactions.
- BellSouth's test bed customer account data loaded and verified by Test Manager.
- Expected results files and test logs completed.
- Test management tools installed and fully configured with test account data.
- TAFI account and security access tools established.
- TAFI terminal stations established and configured.
- TAFI connectivity established.
- Test execution team identified, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.

1.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate TAFI functionality.

Trouble Reports	Create trouble report.

	Modify trouble report.
	Create repeat report.
	Create subsequent report.
	Enter multiple trouble reports. ~~Retrieve LMOS recent status report.~~
	Enter and retrieve trouble reports from queues. ~~Execute manual queuing capabilities.~~
	Execute supervisor functions.
	Close trouble report.
	Cancel trouble report.
Access to Test Capability	Initiate port and loop-port test.
	View port and loop-port test results.
Downstream System Reports	Retrieve LMOS recent status report. ~~Obtain customer line record.~~
	Obtain customer line record (BOCRIS). ~~Obtain predictor results.~~
	Obtain predictor results. ~~View DLR (Display Line Record).~~
	View DLR (Display Line Record). ~~View SOCS pending order (open issue).~~
	View SOCS pending order (open issue). ~~Close trouble report.~~
	~~Close trouble report.~~
	~~Cancel trouble report.~~
Access Error Reports	~~Reset communications.~~
	Host request errors.

Trouble History	Retrieve trouble history.
~~Trouble Status~~General	~~View pending ticket status.~~TAFI Usability.

Figure VII-II: TAFI Functional Test Scope

1.5 Test Activities

1. Review detailed test cycle checklist to ensure that all activities are addressed.
2. Assign TAFI Ids and assign terminals for testing.
3. Submit TAFI test case transactions according to schedule.
4. Log transaction identifier(s) and submission date/time stamp.
5. Receive transaction responses.
6. Log transaction identifier(s) and receipt date/time stamp.
7. Verify that transaction response contains expected results.
8. Analyze timeliness performance.
9. Flag any exceptions or mismatched responses and determine next steps in exception process.
10. Generate test results report.

1.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports completed.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

2.0 M&R-2: ECTA Functional Test

2.1 Description

The ECTA Functional Test will evaluate the functional elements of the trouble reporting and screening process for both telephone number assigned and circuit identified UNEs as delivered to CLECs via the ECTA interface. This test cycle will be executed by exercising a defined set of ECTA functions associated with trouble management activities against test bed accounts.

The functional elements of TN-based and circuit identified UNE trouble reporting and screening to be targeted by this test include the entry and resolution of trouble reports, the query and receipt of status reports, access to trouble reports, and error conditions. The ECTA Functional Test will be conducted against BellSouth's production environment system.

ECTA functionality will be reviewed in conjunction with the documentation addressing its use.

BellSouth will be required to identify or establish a test bed of existing TN-based and circuit-identified UNE customer accounts for the purpose of this test.

The Test Cycle Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMG's performance measurement systems are prepared to track Build test transaction performance prior to beginning the test.

2.2 Objective

The objective of the ECTA Functional Test is to validate the existence of ECTA trouble reporting and screening functionality for both telephone number assigned and circuit identified UNE customers in accordance with BellSouth's published specifications.

2.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- ECTA documentation obtained.
- BellSouth's and KPMG's performance measurement tracking systems prepared to track test transactions.
- BellSouth's test bed customer account data loaded and verified by Test Manager.
- Expected results files and test logs completed.

- Test management tools installed and fully configured with test account data.
- ECTA account and security access tools established.
- ECTA terminals established and configured.
- ECTA connectivity established.
- Test execution team identified, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.

2.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate ECTA functionality.

Trouble Reports	Create trouble report.
	Modify trouble report.
	Add trouble information.
	Cancel trouble report.
	Request trouble ticket status.
	Verify Repair Completion.

Figure VII-III: ECTA Functional Test Scope

2.5 Test Activities

1. Review detailed test cycle checklist to ensure that all activities are addressed.
2. Assign ECTA IDs and terminals for testing.

3. Submit ECTA test case transactions according to schedule.
4. Log transaction identifier(s) and submission date/time stamp.
5. Receive transaction responses.
6. Log transaction identifier(s) and receipt date/time stamp.
7. Verify that transaction response contains expected results.
8. Analyze timeliness performance.
9. Flag any exceptions or mismatched responses and determine next steps in exception resolution process.
10. Generate test results report.

2.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports completed.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

3.0 M&R-3: ECTA Normal Volume Performance Test

3.1 Description

The ECTA Normal Volume Performance Test will evaluate the behavior and performance of the ECTA interface under "normal" YE01 projected transaction load conditions. This test cycle will be executed by a test transaction generator capable of submitting large volumes of resale services and UNE trouble test cases in a manner consistent with ECTA's current and forecasted daily usage patterns and transaction mix, including error conditions.

BellSouth's estimates of YE01 trouble reports for ECTA will be used to calculate hourly transaction levels. The test will be executed during two ten-hour periods by modeling the expected normal daily usage (*e.g.*, the off-peak nighttime hour loads will be excluded for the test). Trouble transaction loads will be distributed geographically across multiple Georgia COs to more accurately reflect a realistic operating environment. BellSouth will ensure that customer test accounts are established and configured accordingly.

The Test Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMG's performance measurement systems are prepared to track Build test transaction performance prior to beginning the test.

3.2 Objective

The objective of the ECTA Normal Volume Performance Test is to measure the performance of the ECTA interface under normal projected YE01 transaction loads.

3.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- M&R-2: ECTA Functional Test successfully completed.
- Test transaction tracking data elements identified.
- Normal volume level defined.
- BellSouth's and KPMG's performance measurement tracking systems prepared to track transactions.
- Successful certification testing for ECTA completed.
- Test Plan defined and approved.

3.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate ECTA normal performance.

Submit Trouble Transactions in Projected Normal Volumes	Create trouble report.
	Modify trouble report.
	Add trouble information.
	Cancel trouble report.

	Request trouble ticket status.
	~~Verify repair completion.~~

Figure VII-IV: ECTA Normal Volume Performance Test Scope

3.5 Test Activities

1. Submit ECTA test case transactions according to schedule.
2. Log transaction identifier(s) and critical performance responsiveness/time stamp information.
3. Verify that transaction responses meet expected results.
4. Flag any exceptions or mismatched responses and determine next steps in exception resolution process.
5. Perform volume responsiveness analysis.
6. Generate test results reports.

3.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports completed.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

4.0 M&R-4: ECTA Peak Volume Performance Test

4.1 Description

The ECTA Peak Volume Performance Test will evaluate the behavior and performance of the ECTA interface under peak YE01 projected transaction load conditions. This test cycle will be run following the execution of the ECTA Normal Volume Performance Test

(M&R-3) and will utilize a sample of resale services and UNE trouble test cases, including error conditions.

The peak volume forecast will be developed using the peak hourly load identified for the ECTA Normal Volume Performance Test and replicating those transaction volumes across an eight-hour period. Alternatively, a multiple may be applied to the non-peak hourly load and the result replicated across an eight-hour day. The methodology and calculations are discussed further in **Appendix C: Volume Analysis.**

The peak volume test will be executed during two separate eight-hour periods. BellSouth will ensure that customer test accounts are established and configured accordingly. Trouble transaction loads will again be distributed geographically across multiple Georgia COs to more accurately reflect a realistic peak load operating environment.

The Test Cycle Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMG's performance measurement systems are prepared to track Build test transaction performance prior to beginning the test.

4.2 Objective

The objective of the ECTA Peak Volume Performance Test is to measure the performance of the ECTA interface under peak projected YE01 transaction loads.

4.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- M&R-3: ECTA Normal Volume Test successfully completed.
- Test transaction tracking data elements identified.
- Peak level volume defined.
- BellSouth's and KPMG's performance measurements tracking systems prepared to track transactions.
- Successful certification testing for ECTA test tools completed.
- Test Plan defined and approved.

4.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate ECTA peak performance.

Submit Trouble Transactions in Projected Peak Volumes	Create trouble report.
	Modify trouble report.
	Add trouble information.
	Cancel trouble ticket.
	Request trouble ticket status.
	~~Verify repair completion.~~

Figure VII-V: ECTA Peak Volume Performance Test Scope

4.5 Test Activities

1. Submit ECTA test case transactions according to schedule.
2. Log transaction identifier(s) and critical performance responsiveness/date/time stamp information.
3. Verify that transaction responses meet expected results.
4. Flag any exceptions or mismatched responses and determine next steps in exception resolution process.
5. Perform volume responsiveness analysis
6. Generate test results report.

4.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports completed.
- Expected results versus actual test case results reported.
- Test report generated.

- Exit review completed.

5.0 M&R-5: TAFI Capacity Management Evaluation

5.1 Description

The TAFI Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of the TAFI interface.

5.2 Objective

The objective of this evaluation is to determine the extent to which procedures to accommodate increases in TAFI system transaction volumes and users are being actively managed.

5.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- Availability of documentation identified as input.
- Interview Guide / Questionnaire developed.
- Interviewees identified and scheduled.
- Detailed evaluation checklists developed.

5.4 Test Scope

The test scope will address the following sub-processes involved in evaluating the management processes and capabilities of BellSouth to support capacity changes in the TAFI process.

TAFI Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring.
	Data verification and analysis of business volumes, resource utilization, and performance monitoring.
	Systems and capacity planning.

Figure VI-VI: TAFI Capacity Management Test Scope

5.5 Test Activities

The test scope will address the following sub-processes and functions to evaluate TAFI capacity management.

1. Review procedural and other documentation related to TAFI capacity management.
2. Conduct interviews with key systems administration and support personnel as appropriate.
3. Document findings.
4. Resolve exceptions.

5.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports completed.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

6.0 M&R-6: ECTA Capacity Management Evaluation

6.1 Description

The ECTA Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of the ECTA interface.

6.2 Objective

The objective of this evaluation is to determine the extent to which procedures to accommodate increases in the ECTA system transaction volumes and users are being actively managed.

6.3 Entrance Criteria

- Global Entrance Criteria satisfied.

- Availability of documentation identified as input.
- Interview Guide / Questionnaire developed.
- Interviewees identified and scheduled
- Detailed evaluation checklists developed.
- Test Plan and evaluation criteria defined and approved.

6.4 Test Scope

The test scope will address the following sub-processes involved in evaluating the management processes and capabilities of BellSouth to support capacity changes in the ECTA process.

ECTA Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring.
	Data verification and analysis of business volumes, resource utilization, and performance monitoring.
	System and capacity planning.

Figure VII-VII: ECTA Capacity Management Evaluation Test Scope

6.5 Test Activities

The test scope will address the following sub-processes and functions to evaluate ECTA capacity management.

1. Review procedural and other documentation related to ECTA capacity management.
2. Conduct interviews with key systems administration and support personnel as appropriate.
3. Document findings.
4. Resolve exceptions.

6.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports completed.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.

7.0 M&R-7: M&R Performance ~~Results Comparison~~Measures Evaluation

7.1 Description

The M&R Performance ~~Results Comparison~~Measures Evaluation is a comparative analysis of M&R performance results collected by KPMG test management tools and by BellSouth's OSS performance measurement system. The source results collected from M&R-1: TAFI Functional Test, M&R-2: ECTA Functional Test, M&R-3: ECTA Normal Volume Performance Test, and M&R-4: ECTA Peak Volume Performance Test will be compared to BellSouth's performance results; accuracy and trends will be identified; and disparities will be analyzed for significance.

7.2 Objective

The objective of the M&R Performance ~~Results Comparison~~Measures Evaluation is to assess the accuracy of BellSouth's wholesale performance metrics results using Build test transactions.

7.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- Results comparison strategy defined.
- Target M&R performance metrics identified.
- Keys required for BellSouth to separate Build transactions identified.
- TAFI/ECTA Functional Tests completed with disaggregated performance metrics reports (including raw data in electronic form).
- Functional tests will include faults where appropriate.

- ECTA Normal and Peak Volume Performance Tests completed with disaggregated performance metrics reports (including raw data in electronic form).
- Test execution scheduled.
- Test logs created and results reporting template completed.
- Test execution team staffed, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.
- Guidelines for measuring variances defined.

7.4 Test Scope

The test scope will address the following sub-processes and functions to compare performance results.

~~Missed Repair Appointment~~	~~UNE Designed.~~
	~~UNE Non-Designed.~~
~~Percentage of Subsequent Reports~~	~~UNE Designed.~~
	~~UNE Non-Designed.~~
~~Maintenance Average Duration~~	~~UNE Designed.~~
	~~UNE Non-Designed.~~
~~Out of Service > 24 Hours~~	~~UNE Designed.~~
	~~UNE Non-Designed.~~
~~Repeat Troubles within 30 Days~~	~~UNE Designed.~~
	~~UNE Non-Designed.~~
~~OSS Response Interval~~	~~UNE Designed.~~

	~~UNE Non-Designed.~~
~~Average Answer Time~~	~~UNE Designed.~~
	~~UNE Non-Designed.~~
Missed Repair Appointments	POTS – Residence, Business Design PBX, CENTREX, and ISDN UNE 2 Wire Loop (Design and Non-Design) UNE Loop Other (Design and Non-Design) UNE Other (Design and Non-Design) Dispatch/No Dispatch
Customer Trouble Report Rate	POTS – Residence, Business Design PBX, CENTREX, and ISDN UNE 2 Wire Loop (Design and Non-Design) UNE Loop Other (Design and Non-Design) UNE Other (Design and Non-Design) Dispatch/No Dispatch
Maintenance Average Duration	POTS – Residence, Business Design PBX, CENTREX, and ISDN UNE 2 Wire Loop (Design and Non-Design) UNE Loop Other (Design and Non-Design) UNE Other (Design and Non-Design) Dispatch/No Dispatch
Percent Repeat Troubles within 30 days	POTS – Residence, Business Design PBX, CENTREX, and ISDN UNE 2 Wire Loop (Design and Non-Design) UNE Loop Other (Design and Non-Design) UNE Other (Design and Non-Design)

	Dispatch/No Dispatch
Out of Service > 24 hours	POTS – Residence, Business Design PBX, CENTREX, and ISDN UNE 2 Wire Loop (Design and Non-Design) UNE Loop Other (Design and Non-Design) UNE Other (Design and Non-Design) Dispatch/No Dispatch
OSS Interface Availability	Not Disaggregated.
OSS Response Interval and Percentages	Not Disaggregated.
Average Answer Time – Repair Centers	Not Disaggregated.

Figure VII-VIII: M&R Performance ~~Results Comparison~~Measures Evaluation Test Scope

7.5 Test Activities

1. Acquire and format BellSouth performance data files.
2. Compare disaggregated BellSouth performance results with Build performance results.
3. Flag any unexplained variance(s) in results comparison and determine next steps in exception and resolution process.
4. Generate comparative analysis results reports.

7.6 Exit Criteria

- Global Exit Criteria satisfied.
- Comparative analysis report completed.
- Results variance findings documented.
- Exception report completed.

- Test cycle results summary report completed.
- Exit review completed.

8.0 M&R-8: TAFI Documentation Evaluation

8.1 Description

The TAFI Documentation Evaluation is an analysis of the BellSouth-provided documentation used by CLECs to interface and interact with the TAFI interface for maintenance and repair activities. This evaluation is intended to review the availability, accuracy, and completeness of BellSouth's maintenance and repair documentation using a variety of operational analysis techniques. This test uses records of observations from M&R-1: TAFI Functional Test and CLEC TAFI End User Training Manuals to identify exceptions in documentation and functionality described in the business rules.

8.2 Objective

The objective of the TAFI Documentation Evaluation is to assess whether the documentation provided by BellSouth adequately assists CLECs in understanding how to implement and use all of the TAFI functions available to them.

8.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- TAFI documentation obtained.
- Teams staffed, scheduled, and trained.
- Documentation evaluation checklists completed.
- Test Plan and evaluation criteria defined and approved.
- Interview guide/questionnaire developed.
- Interviewees identified and scheduled.
- Exception reports due to documentation from M&R 1: TAFI Functional Test obtained.
- BellSouth and CLEC documentation order specialist and user contact information obtained.

- Process for logging incidents defined and accepted.

8.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate TAFI documentation along with additional relevant information identified during the test.

[illegible]	[illegible]
M&R Documentation	Document structure and format.~~CLEC TAFI End-User Training and User Guide.~~
	Document content.~~CLEC Training Guide (M&R Sections).~~
	Release management.~~TAFI Online Help.~~
	Trouble report.~~Carrier Notifications on BellSouth's website.~~
	Access to test capability.
	Access to downstream system reports.
	Error reports.
	Trouble history.

Figure VII-IX: TAFI Documentation Evaluation Test Scope

8.4.1 Documents in Test Scope

The following is a non-exclusive list of documents to be examined:

- CLEC TAFI End-User Training and User Guide
- CLEC Training Guide
- TAFI Online Help
- Carrier Notifications from BellSouth's Web site

8.5 Test Activities

1. Obtain relevant documentation needed to carry out business processes related to M&R.
2. Conduct documentation evaluation using documentation evaluation checklist.
3. Conduct interviews with BellSouth documentation specialists.
4. Conduct interviews with CLEC documentation users.
5. Log incidents noted during test.
6. Compile results.
7. Flag any exceptions or mismatched responses and determine next steps in execution resolution process.

8.6 Exit Criteria

- Global Exit Criteria satisfied.
- Documentation checklists completed.
- Interview summaries completed.
- Exception report(s) completed.
- Summary evaluation report completed.
- Exit review completed.

9.0 M&R-9: ECTA Documentation Evaluation

9.1 Description

The ECTA Documentation Evaluation is an analysis of the BellSouth-provided documentation used by CLECs to interface and interact with the ECTA interface for maintenance and repair activities. This evaluation is intended to review the accuracy, ease of use and conformance to ANSI standards of BellSouth's maintenance and repair documentation using a variety of operational analysis techniques. This test will use records of observations from M&R-2: ECTA Functional Test and CLEC ECTA End User Joint Implementation Agreement (JIA) to identify issues with documentation and functionality described in the business rules.

9.2 Objective

The objective of the ECTA Documentation Evaluation is to comment on whether the documentation provided by BellSouth adequately assists CLECs in understanding how to implement and use all of the ECTA functions available to them.

9.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- ECTA documentation obtained.
- Teams staffed, scheduled and trained.
- Documentation evaluation checklist completed.
- Test Plan and defined and approved.
- Issues due to documentation from M&R-2: ECTA Functional Test obtained.
- Process for logging issues defined and accepted.

9.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate ECTA documentation along with additional relevant information identified during the test.

M&R Documentation	Joint Implementation Agreement (JIA) for Electronic Communications Trouble Administration (ECTA) Gateway for Local Service.
	~~Joint Implementation Agreement (JIA) for Electronic Communications Trouble Administration (ECTA) Gateway for Local Service.~~

Figure VII-X: ECTA Documentation Evaluation Test Scope

9.5 Test Activities

1. Obtain relevant documentation needed to carry out business processes related to M&R.
2. Conduct documentation evaluation using documentation evaluation checklist.
3. Log incidents noted during testing.
4. Compile results.
5. Flag any exceptions or mismatched responses and determine next steps in execution resolution process.

9.6 Exit Criteria

- Global Exit Criteria satisfied.
- Documentation checklists completed.
- Interview summaries completed.
- Summary evaluation report completed.
- Exit review completed.

10.0 M&R-10: M&R Process Evaluation

10.1 Description

This evaluation is comprised of two major elements. The first (Sub-Test 1) evaluates the functional equivalence of BellSouth's M&R processes for wholesale and retail trouble reports. Process flows for wholesale and retail trouble management will be reviewed and evaluated along with technician methods and procedures (M&P) and job aids for wholesale trouble repair.

The second element (Sub-Test 2) involves the execution and observation of selected M&R test scenarios to evaluate BellSouth's performance in making repairs under the conditions of various wholesale maintenance scenarios.

10.2 Objective

The objective of Sub-Test 1 is to evaluate the equivalence of BellSouth's end-to-end processes for retail and wholesale trouble reporting and repair. The objective of Sub-Test 2 is to evaluate BellSouth's performance in making repairs under the conditions of various wholesale maintenance scenarios.

10.3 Entrance Criteria

The entrance criteria for this test are presented by sub-test.

10.3.1 Entrance Criteria for Sub-Test 1

- Global Entrance Criteria satisfied
- Retail and Wholesale process flow documentation available.
- Retail and Wholesale Technician job aids (e.g. M&Ps) are available.

10.3.2 Entrance Criteria For Sub-Test 2

- Global Entrance Criteria satisfied.
- BellSouth's and KPMG's performance measurement tracking systems prepared to track test transactions.
- BellSouth test-bed and customer account data loaded and verified by Test Manager.
- Test scenarios selected and approved.
- Evaluation criteria, expected result files and test logs defined and approved.

10.4 Test Scope

The test scope will address the following sub-processes and functions to evaluate the M&R process.

1. End-to-End M&R Process	Compare process flow and work support documentation for retail and wholesale.
2. End-to-End Trouble Report Processing	Observe and assess trouble report processing under various wholesale maintenance conditions using BellSouth test facilities.

Figure VII-XI: M&R Process Test Scope

10.5 Test Activities

The test activities for this test are presented by sub-test.

10.5.1 Test Activities Sub-Test 1

1. Identify and obtain all process and work support (e.g. M&Ps) documentation available for review.
2. Review documentation and identify differences between wholesale and retail processes.
3. Interview BST personnel to ascertain parity in M&R process between retail and wholesale.
4. Flag any exceptions and determine next steps in exception resolution process.
5. Document process analysis results.

10.5.2 Test Activities Sub-Test 2

1. Confirm that test bed facilities are operational and introduce faults as needed.
2. Conduct circuit test if applicable for each test scenario.
3. Log test results.
4. Create and submit trouble ticket via TAFI or ECTA.
5. Periodically monitor each trouble report throughout its life.
6. Log significant events in the trouble report life cycle (error occurrences, corrections, trouble ticket submission time, time cleared, etc.)
7. Calculate time to repair measurements for each test scenario fault repaired.
8. Document observations.
9. Flag any exceptions or mismatched responses and determine next steps in exception resolution process.
10. Generate test results report.

10.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports completed.
- Expected results versus actual test case results reported.

- Test report generated.
- Exit review completed.

Appendix B-3

Appendix B3:
UNE Scenarios

UNE Ordering Scenarios

A. Primary Categories

UNE Ordering Scenarios were generated by applying BellSouth's OSS Electronic Ordering business rules and logical business requirements across the following primary categories:

[illegible]	[illegible]
1. Product and Services	The UNEs being ordered, configured, or operated upon by the CLEC.
2. Activity Types	The valid account level Activity Types (ACT) for the Requisition Type (REQTYP) of the different UNEs being ordered.[1] The Activity Type also defines the initial and final LSP for the transaction.
3. Customer Type	The Customer Type category addresses only business and residential end users. The Master Test Plan excludes government type.
4. Flow-Through	A determination of whether or not an electronically submitted order will be processed by BellSouth's OSS without manual intervention through return of FOC.
5. Partial Migration	A determination of whether or not a customer with a multi-line account migrates some of the lines to a new LSP while at least one line remains with the RBOC.
6. UNE Type	The types of UNE that a CLEC can order are Non-Designed (SL1) and Designed (SL2) UNE loops.

Figure B3-I: UNE Scenario Coverage

1. Products and Services

Figure B3-II lists the individual UNEs covered in the Test as a result of the product selection analysis described in Appendix A of this Master Test Plan.

[illegible]
2-Wire Analog Designed Loop
2-Wire Analog Non-Designed Loop
INP
LNP
2-Wire Analog Line Port
2-Wire Analog Loop-Port Combination

Figure B3-II: UNE Products

[1] LEO Implementation Guide – Volume 1, Issue 7F, March 1999.

2. Activity Types

Figure B3-III describes the UNE Requisition Type (REQTYP) and Figure B3-IV describes the account level UNE Activity Type (ACT) codes defined by BellSouth and referenced throughout this Appendix.[2]

A	Loop
B	Loop w/ NP
C	NP
F	Port
J	Directory Listings
M	Loop-Port Combination

Figure B3-III: UNE Requisition Types

A	Add (New Install)
C	Change
D	Disconnect
M	Inside Move
T	Outside Move
R	Record (Administrative)
V	Migrate As-Specified
W	Migrate As-Is
SS	Suspend Service
RS	Restore Service

Figure B3-IV: UNE Activity Types

Figure B3-V summarizes the allowable UNE REQTYP and ACT combinations as defined by BellSouth.

		X	X	X	X	X		X			
								X			
			X	X				X	X		

[2] Ibid.

		X	X	X				X		X	X
		X		X							
		X	X	X	X	X		X		X	X

Figure B3-V: UNE REQTYP and ACT Scenario Coverage

3. Customer Type

The Customer Type category addresses only business and residential end users. The Master Test Plan excludes government.

4. Flow-Through

Flow-Through is defined as orders that have less than 25 lines. Those scenarios that will test flow-through are marked in a checklist box on the description. Since it is not feasible for a residential customer to order over 25 lines, there will only be flow-through scenarios for residential customers.

5. Partial Migration

A partial migration occurs when a customer has a multi-line account and migrates some of their lines to a new Local Service Provider (LSP) while at least one line remains with the initial LSP. Only REQTYPE B, C, and F have the option of being partially migrated. Those scenarios that will test partial migrations are marked in a checklist box on the description.

6. UNE Type

The types of UNE loops that a CLEC can order are Non-Designed (SL1) and Designed (SL2) UNE loops.

B. Test Case Definition (Secondary Requirements)

Additional requirements or variables will be introduced below the test scenario level in order to define individual test cases. These secondary requirements will address the following:

- DLR (for 2 wire analog designed loops only)
- Coordination (for 2 wire analog non-designed loops only)
- Time-specific coordination (for 2 wire analog non-designed loops only)
- Vertical features (for UNE ports and loop-port combos)
- Directory Listing (for Activity Types A, M, T, and V)
    - e.g., change in company name or adding telephone numbers

- Order supplements (for all UNE types)
  - e.g., changes to in-process orders
- Designed errors (for all UNE types)
  - e.g., invalid entries
- Cancels (for all UNE types)

Test scenarios specify the number of lines for a given customer account. This number is subject to change on a test case level based on limitations of the BellSouth test data. The potential change in the number of customer lines will not affect the flow-through status. (Flow-through occurs on orders of up to 25 lines.) For example, when a flow-through test scenario requires a business customer account with 10 lines and BellSouth's test data only offers an account with either 2 or 26 lines, the account with 2 lines will be used as in the test scenario.

C. UNE Ordering Coverage

The following table illustrates coverage of the UNE ordering test scenarios along the six primary categories described above.

[illegible]	[illegible]
UNE Loop Ordering Test Scenarios	301-324, 620, 630, 700, 701
UNE Loop with INP Ordering Test Scenarios	325-335
UNE Loop with LNP Ordering Test Scenarios	349-359, 800
UNE INP Ordering Test Scenarios	373-382
UNE LNP Ordering Test Scenarios	383-388, 801
UNE Port Ordering Test Scenarios	395-419
UNE Loop-Port Ordering Test Scenarios	420-445, 602, 604, 702
UNE Standalone Directory Listing Scenarios	450-458

Figure B3-VI: UNE Ordering Coverage

301	A CLEC orders2 new SL1 unbundled analog loops from BST in support of a customer's service request.	None	UNE Loop	N/A	CLEC	X		X										X	
302	A CLEC orders 26 new SL1 unbundled analog loops from BST in support of a new customer's service request.	None	UNE Loop	N/A	CLEC		X	X										X	
303	A CLEC orders 2 new SL2 unbundled analog loops from BST in support of a new customer's service request.	None	UNE Loop	N/A	CLEC	X		X											X
305	A CLEC orders 2 SL1 unbundled analog loops to support of a full migration service request from an existing BST customer. The customer lines are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC	X								X				X	
307	A CLEC orders 2 SL2 unbundled analog loops in support of a full migration service request from an existing BST customer. The customer lines are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC	X								X					X
308	A CLEC orders 26 SL2 unbundled analog loops in support of a full migration service request from an existing BST customer. The customer lines are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC		X							X					X
309	A CLEC orders 2 SL1 unbundled analog loops from BST for one of its resale customers.	Resale	UNE Loop	CLEC	CLEC	X								X				X	
311	A CLEC orders 2 SL2 unbundled analog loops from BST for one of its resale customers.	Resale	UNE Loop	CLEC	CLEC	X								X					X
312	A CLEC orders 26 SL2 unbundled analog loops from BST for one of its resale customers.	Resale	UNE Loop	CLEC	CLEC		X							X					X

315	A CLEC orders a change -(e.g., add a loop to an existing account) on 2 SL2 unbundled analog loops in response to a CLEC customer complaint.	UNE Loop	UNE Loop	CLEC	CLEC	X			X									X
317	An existing CLEC customer moves from the 3rd to the 5th floor. The CLEC orders an inside move on both of its customer's SL1 unbundled analog loops from BST.	UNE Loop	UNE Loop	CLEC	CLEC		X				X						X	
318	An existing CLEC customer moves from the 3rd to the 5th floor. The CLEC orders an inside move on both of its customer's SL2 unbundled analog loops from BST.	UNE Loop	UNE Loop	CLEC	CLEC		X				X							X
319	An existing CLEC customer moves across town. The CLEC orders an outside move on both of its customer's SL1 unbundled analog loops from BST.	UNE Loop	UNE Loop	CLEC	CLEC		X					X					X	
320	An existing CLEC customer moves across town. The CLEC orders an outside move on both of its customer's SL2 unbundled analog loops from BST.	UNE Loop	UNE Loop	CLEC	CLEC		X					X						X
323	An existing CLEC customer is moving to another state. The CLEC orders BST to disconnect both of its customer's SL1 unbundled analog loops.	UNE Loop	None	CLEC	N/A	X				X							X	
324	An existing CLEC customer is moving to another state. The CLEC orders BST to disconnect both of its customer's SL2 unbundled analog loops.	UNE Loop	None	CLEC	N/A	X				X								X
600	Migrate 2 auxiliary lines of a BST retail 4 line customer to CLEC UNE SL2 analog loop	Simple	UNE Loop	BST	CLEC	X								X				X
620	An existing CLEC customer disconnects one of their existing 3 SL1 unbundled analog loops.	UNE Loops	UNE Loop	CLEC	CLEC	X				X							X	

630	A CLEC migrates an existing UNE loop-port combination 2-line customer to UNE analog SL2 loops.	Loop-Port Combo	UNE Loop	CLEC	CLEC		X						X				X
700	Migrate an existing CLEC single line resale customer to another CLEC UNE SL1 analog loop.	Resale	UNE Loop	CLEC 1	CLEC 2	X							X			X	
701	Migrate an existing CLEC 1 line SL1 loop customer to another CLEC UNE SL1 analog loop.	UNE Loop	UNE Lobp	CLEC 1	CLEC 2	X							X			X	

Figure B3-VII: UNE Loop Ordering Test Scenarios

325	A CLEC orders 2 SL1 unbundled analog loops with INP in support of a partial migration service request from an existing BST customer. The customer currently has 6 lines, 4 of which stay with BST and 2 are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC		X						X			X		X	
326	A CLEC orders 2 SL1 unbundled analog loops with INP in support of a full migration service request from an existing BST customer. The customer lines are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC	X							X			X			X
328	A CLEC orders 26 SL1 unbundled analog loops with INP in support of a full migration service request from an existing BST customer. The customer lines are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC		X						X			X			X

329	A CLEC orders 2 SL2 unbundled analog loops with INP in support of a partial migration service request from an existing BST customer. The customer currently has 6 lines, 4 of which stay with BST and 2 are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC		X						X				X	X	
330	A CLEC orders 2 SL2 unbundled analog loops with INP in support of a full migration service request from an existing BST customer. The customer lines are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC	X							X				X		X
333	A CLEC orders 2 SL1 unbundled analog loops with INP from BST for one of its resale customers.	Resale	UNE Loop	CLEC	CLEC	X							X			X			
334	A CLEC orders 26 SL1 unbundled analog loops with INP from BST for one of its resale customers.	Resale	UNE Loop	CLEC	CLEC		X						X			X			
335	A CLEC orders 2 SL2 unbundled analog loops with INP from BST for one of its resale customers.	Resale	UNE Loop	CLEC	CLEC	X							X				X		

Figure B3-VIII: UNE Loop with INP Ordering Test Scenarios

349	A CLEC orders 2 SL1 unbundled analog loops with LNP in support of a partial migration service request from an existing BST customer. The	Simple	UNE Loop	BST	CLEC		X						X				X		X	

	customer currently has 6 lines, 4 of which stay with BST and 2 are migrated "as-specified" to the CLEC.																		
350	A CLEC orders 2 SL1 unbundled analog loops with LNP in support of a full migration service request from an existing BST customer. The customer lines are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC	X								X			X			X
351	A CLEC orders 26 SL1 unbundled analog loops with LNP in support of a partial migration service request from an existing BST customer. The customer currently has 31 lines, 5 of which stay with BST and 26 are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC		X							X			X		X	
353	A CLEC orders 2 SL2 unbundled analog loops with LNP in support of a partial migration service request from an existing BST customer. The customer currently has 6 lines, 4 of which stay with BST and 2 are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC		X							X				X	X	
354	A CLEC orders 2 SL2 unbundled analog loops with LNP in support of a full migration service request from an existing BST customer. The customer lines are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC	X								X				X		X
355	A CLEC orders 26 SL2 unbundled analog loops with LNP in support of a partial migration service request from an existing BST customer. The customer currently has 31 lines, 5 of which stay with BST and 26 are migrated "as-specified" to the CLEC.	Simple	UNE Loop	BST	CLEC		X							X				X	X	
357	A CLEC orders 2 SL1 unbundled analog loops with LNP from BST for one of its resale customers.	Resale	UNE Loop	CLEC	CLEC	X								X			X			
358	A CLEC orders 26 SL1 unbundled	Resale	UNE	CLEC	CLEC		X							X			X			

	analog loops with LNP from BST for one of its resale customers.		Loop																				
359	A CLEC orders 2 SL2 unbundled analog loops with LNP from BST for one of its resale customers.	Resale	UNE Loop	CLEC	CLEC	X								X					X				
800	Migrate 'as-is' a 2-line BST residence customer to 2 UNE analog SL1 loops with LNP. Directory Listings remain the same.	Simple	LNP	BST	CLEC	X									X			X					

Figure B3-IX: UNE Loop with LNP Ordering Test Scenarios

373	A CLEC ports 2 of its existing 6 numbers to CLEC via INP.	Simple	INP	BST	CLEC	X								X					X				
374	A CLEC orders INP for both of its fully migrated lines from BST.	Simple	INP	BST	CLEC	X								X									X
375	A CLEC ports 26 of its existing 31 numbers to CLEC via INP.	Simple	INP	BST	CLEC		X							X					X				
377	A CLEC orders INP for 2 lines in support of an existing resale customer being migrated to CLEC facilities.	Resale	INP	CLEC	CLEC	X								X									
382	An existing CLEC customer is moving to another state. The CLEC orders BST to disconnect INP for all 6	INP	None	CLEC	N/A	X				X													

	of its customer's lines.																	

Figure B3-X: UNE INP Ordering Test Scenarios

383	A CLEC ports 2 of its existing 6 numbers to CLEC via LNP.	Simple	LNP	BST	CLEC		X						X				X	
384	A CLEC orders LNP for both of itsfully migrated lines from BST.	Simple	LNP	BST	CLEC	X							X					X
385	A CLEC ports 26 of its existing 31 numbers to CLEC via LNP.	Simple	LNP	BST	CLEC		X						X				X	
386	A CLEC orders LNP for all 26 fully migrated lines from BST.	Simple	LNP	BST	CLEC		X						X					X
387	A CLEC orders LNP for 2 lines in support of an existing resale customer being migrated to CLEC facilities.	Resale	LNP	CLEC	CLEC	X							X					
388	A CLEC orders LNP for 26 lines in support of an existing resale customer being migrated to CLEC facilities.	Resale	LNP	CLEC	CLEC		X						X					
801	A CLEC orders LNP for 2 retail business lines. Directory listings remain the same.	Simple	LNP	BST	CLEC	X								X				

Figure B3-XI: UNE LNP Ordering Test Scenarios